

### ABSTRACT OF THE DISCLOSURE

An apparatus comprising of a segmented instrument tray, precision scale, image processing system, photoelectric sensors and a Personal Computer (PC) is disclosed. Said apparatus provides an automated and accurate tracking of surgical instruments used during surgical operating procedure by counting and identifying a specific quantity and instrument type, which are removed from a sterilized instrument tray to be used during the procedure and subsequently returned to the tray upon procedure completion, thus preventing an accidental leaving of an instrument inside of a patient and significantly reducing time spent by the operation staff for the instrument accounting.